SPIXIANA	6	2	149–151	München, 1. Juli 1983	ISSN 0341-8391

Notodontidae (Lepidoptera) from Kali Gandaki Valley in Central Nepal.

By **Wolfgang Dierl**

Entomological Department, Zoologische Staatssammlung, München

Abstract

During the field work of the German Expedition to Central Nepal in 1973 a number of moths was collected including 13 species of the family Notodontidae which are listed below. A new synonymy is pointed out: *Micromelalopha* Nagano, 1916 = *Bifurcifer* Ebert, 1968, syn. nov. *Bifurcifer afghanus* Ebert, 1968 = *Micromelalopha similis* Dierl, 1978, syn. nov.

Introduction

The Kali Gandaki Valley which is penetrating the Himalayan main range with Dhaulagiri to the west and Annapurna to the east provides a series of climatic types within a short distance, ranging from the wet and hot monsoon area in the south to the rather cold and dry areas north of the Himalayan range. Therefore, a large number of ecological very different animals can be found. The main task of the German Zoological Expedition in 1973 was to study the distribution of animals of different ecological types, their habitats and the abiotic factors in the environment in order to find a biogeographic correlation.

The collecting sites are described by Dierl and Gruber (1979). The places mentioned in this paper are Kalopani (2500 m), semihumid forest area, Dhaulagiri (3700 m), humid pasture above the tree line, Choklopani (2600 m), semiarid forest, and Syang (3950 m), semiarid subalpine area.

There are three zoogeographic types of species in that area concerning Notodontidae: Oriental, which are originating from the south, Himalayan which are distributed in the temperate humid Asiatic region, and Palearctic. The Himalayan usually are divided in wide raging ones, Sino-Himalayan, and Himalayan endemites. They can be considered to have the same ecological origin.

Distribution of the ecological types

	Kalopani		Dhaulagiri	Choklopani	Syang
Palearctic	1	1			
Oriental	1	1			
Sino-Himalayan	6	5	1	3	
Himalayan	5	5		1	1

1. *Dudusa sphingiformis* Moore, 1872. Proc. Zool. Soc. Lond., 1872.
   Kalopani 2500 m, 5.VI.: 1♂.

A forest species in temperate areas, distributed from Nepal, NE. India to China, Korea and Japan. Sino-Himalayan element.

2. *Baradesa lithosioides* Moore, 1883. Proc. Zool. Soc. Lond., **1883.**
Kalopani 2500 m, 31.V.–4.VI.: 8♂.
Syang 4000 m, 7.VII.: 1♂.

A species of Quercus-Rhododendron forest which even enters the coniferous forest. Distribution from Nepal to NE. India and Burma. An E. Himalayan element.

3. *Norraca xanthophila* Walker, 1865. List. Lep. Ins. B. M., **32.**
Kalopani 2500 m, 2.VI.: 1♀.

This species in widely distributed from Nepal to NE. India, Philippine islands and Java. Oriental element.

4. *Subniganda auratiistriga* Kiriakoff, 1962. – Bonner zool. Beitr. **13.**
Kalopani 2500 m, 8.VI.: 1♂.

This species was described from Shensi, WC. China, a Sino-Himalayan element.

5. *Ogulina apicalis* Kiriakoff, 1962. Bonner zool. Beitr. **13.**
Kalopani 2500 m, 1.–15.VI.: 9♂, 1♀.
Choklopani 2600 m, 20.VI.: 1♂.

Described from Shensi, like the preceding species it is a Sino-Himalayan element.

6. *Mimopydna sikkima* Moore, 1879, Descr. Lep. Atkinson.
Choklopani 2600 m, 23.VI.: 1♂.

Distributed in Nepal, SE-India and S. China, a Sino-Himalayan element.

7. *Rachia plumosa* Moore, 1879, Descr. Lep. Atkinson.
Kalopani 2500 m, 1.–15.VI.: 3♂.
Choklopani 3200 m, 24.VI.: 1♂.
Dhaulagiri 3700 m, 10.–13.VI.: 1♀.

A species of the temperate mountain forests, distributed from Nepal to Sikkim and SW-China, a Sino-Himalayan element.

8. *Zaranga pannosa* Moore, 1884. Trans. Ent. Soc. Lond., **1884.**
Kalopani 2500 m, 6.VI.: 1♂.

Distributed in Nepal, NE. India and SW-China, a Sino-Himalayan element.

9. *Acmeshachia albifascia* Moore, 1879, Descr. Lep. Atkinson.
Kalopani 2500 m, 31.V.–3.VI.: 1♂, 1♀.

This species in known from Nepal and Sikkim only.

10. *Megaceramis lamprolepis* Hampson, 1893. Moth of India, **1.**
Kalopani 2500 m, 31.V.–15.VI.: 2♂, 5♀.

This species is known from Nepal and Sikkim only.

11. *Pseudonerice unidentata* Bryk, 1949. Ark. f. Zool., **42A,** Nr. 19.
Kalopani 2500 m, 31.V.–2.VI.: 3♂.

Known from Nepal and Burma, E. Himalayan element.

12. *Clostera anachoreta* Fabricius, 1787. Mat. Ins., **2.**
Kalopani 2500 m, 5.VI.: 1♂.

13. *Micromelalopha afghana* Ebert. Reichenbachia **10:** 203. comb. nov.
Bifurcifer afghana Ebert, 1968. Loc. cit., p. 204.
Micromelalopha similis Dierl, 1978. Nachrbl. Bayer. Ent., **27:** 71 syn. nov.

This species which is described from Afghanistan, Kabul river, is a Himalayan element and, perhaps, the species from C-Nepal may represent a subspecies.

Conclusion

This collecting is rather poor, but considering the time of the field work (Early summer), there are definitely some more species which are active later in season. Another reason, depending on the ecological conditions, is, that most of the Notodontidae are forest species, which do not proceed much further towards the north than Kalopani. This fact can easily be seen from the collecting data.

The composition of this fauna is almost a Sino-Himalayan one, which means the species are restricted to temperate mountain areas, but are originating from or related to Oriental species and genera. Just a single species is originally Oriental (tropical) and might have immigrated. Another single species is Palearctic. It seems that the distribution of Lepidoptera in the Himalayan areas is a results of their ecological abilities and not so much of their strong or weak flight. Ecological very adapted Sphingidae for example, do not leave their habitat, even when they are very strong flyers (DIERL, 1970).

Literature

DIERL, W. 1970: Grundzüge einer ökologischen Tiergeographie der Schwärmer Ostnepals. – Khumbu Himal **3**: 313–360

DIERL, W. & GRUBER, U. 1979: Habitat Conditions in the Transitional Zone in Central Nepal. – Spixiana **2**: 1–47

Authors address:
Dr. Wolfgang Dierl,
Zoologische Staatssammlung,
Maria-Ward-Str. 1b, D-8000 München 19